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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CHANNAVAJALA, LAKSHMI SARADA

ART UNIT PAPER NUMBER

1615

DATE MAILED: 09/10/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/877,257

Applicant(s)

HINO ET AL.

Examiner

Lakshmi S Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

Receipt of Fee and Declaration, dated 10-2-01 is acknowledged.

Claims 1-3 are pending.

#### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 4-4-00. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

#### ***Specification***

2. The abstract of the disclosure is objected to because it is lengthy.

Applicant is reminded of the proper content of an abstract of the disclosure. A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof.

Correction is required. See MPEP § 608.01(b).

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "on an average" with respect to the value of variables m, which is indefinite because it is not clear from the claim as the values are averages of what and how it is determined. For examination purposes, examiner considers the value of m as 1-50. Clarification and appropriate correction is requested.

***Claim Rejections - 35 USC § 102***

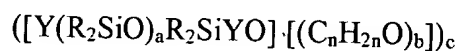
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,472,686 to Tsubaki et al (hereafter Tsubaki).

Tsubaki teaches cosmetic formulations such as hair care and skin care products comprising a polysiloxane polymer comprising a polysiloxane--polyoxyalkylene block as a repeating unit, the general formula (in col. 3, lines 33-50), is



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Where, R is a monovalent hydrocarbon radical with no unsaturation,  $n=2-4$ ;  $b=\text{at least } 4$ ;  $c=\text{at least } 4$ ,  $a=\text{at least } 5$ ; Y is a divalent organic group bonded with an adjacent silicon atom by a carbon-silicon linkage and with a polyoxyalkylene block by an oxygen atom.

Instant claim 1 recites polysiloxane, in which the variable R1 is an alkyl group containing 1-30 carbon atoms, aryl group or a  $(R^2)_3\text{SiO-}$  or  $-\text{YO}(\text{C}_2\text{H}_4\text{O})_a(\text{C}_3\text{H}_6\text{O})_b\text{R}_3$ . Further, instant claim states that Y is a divalent organic group bound to an adjacent silicon atom through a carbon – silicon bond and to a polyoxyalkylene block by an oxygen atom.

Thus, the variable Y of the polysiloxane of Tsubaki reads on the variable Y of the instant claim 1. Further, while instant claim 1 defines the value of  $m = 1$  to 50, the corresponding variable “a” of Tsubaki is defined as at least 4, which is within the claimed range of the instant invention. While the prior art polysiloxane includes the variable Y on both sides of the siloxane unit, according to the instant claim 1, at least one R is  $-\text{YO}(\text{C}_2\text{H}_4\text{O})_a(\text{C}_3\text{H}_6\text{O})_b\text{R}_3$ , allowing for more than one R to be a  $-\text{YO}(\text{C}_2\text{H}_4\text{O})_a(\text{C}_3\text{H}_6\text{O})_b\text{R}_3$  group. Instant variables “a” and “b” correspond to the variables “b” and “c” of Tsubaki. Instant claim requires that “a” and “b” are numbers 0 to 50 respectively, but together  $a+b$  is equal to or greater than 2. Tsubaki teaches b and c each as at least 4, thus satisfying the instant requirement  $a+b$  is equal to or greater than 2.

With respect to claim 3, examiner notes that instant specification states that a hair-growing agent generally comprises a pharmaceutically active component, solvent and additives. Tsubaki discloses a hair treatment composition containing the polysiloxane described above, an antiseptic, which read on the claimed pharmaceutically active components (example 21, in col. 12, lines 9-38) and water (reads on the instant carrier). Tsubaki teaches that the hair treatment composition comprising the polysiloxane-polyoxyalkylene block copolymer imparts superior

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combing, smoothness, wetness, flexibility, brilliance, moisture-retaining ability and coating effect to the hair. Thus Tsubaki anticipates instant claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,051,730 to Pallas et al (hereafter Pallas).

Pallas teaches a solid water-soluble complex comprising a polysiloxane containing polyoxyalkylene group or polysiloxane in which at least one R group is substituted with a carbon chain containing 6 to 30 carbon atoms. In particular, formula V of Pallas (col. 6, lines 50-67) shows a polysiloxane, which reads on the instant polysiloxanes of claims 1 and 2. In formula V, the terminal siloxanes contain trimethyl groups, which are within the claimed range of R1 and R2 of claims 1 and 2 respectively (instant R1= alkyl group with 1-30 carbon atoms and R2= alkyl group with 1-5 carbon atoms). Instant claim 2 requires R4 to be an alkyl group with 6 to 30 carbon atoms or a  $-YO(C_2H_4O)_a(C_3H_6O)_bR_3$  group. Pallas teaches a polyoxyalkylene group attached to the polysiloxane which reads on the instant formula  $YO(C_2H_4O)_a(C_3H_6O)_bR_3$ . The variable "y" in the formula V of Pallas is 0 to 5 and variable "x" is 1 to 5. Accordingly, the combination of variables x and y could be 10, which is still within the claimed range of "m" of

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claim 1. Further, if "y" = 0 and "x"=1, the resulting polysiloxane reads on the compound of instant claim 2. Formula VII of Pallas (col. 7, lines 16-35) shows polysiloxanes containing both alkyl groups of 6 to 30 carbon atoms as well as a polyoxyalkylene group.

It would have been obvious for one of an ordinary skill in the art at the time of the instant invention to optimize the variables "x" and "y" of Pallas to prepare the claimed polyoxyalkylene-polysiloxanes because both the instant claims and Pallas are directed to polyoxyalkylene-polysiloxanes and Pallas teaches the combination of variables "x" + "y" = 0 to 10 that encompasses the instant m=1.

Pallas does not teach the compounds as additives for hair growing agent and instead teaches the compounds as adjuvants with excellent wetting characteristics. However, since the instant claims are directed to an additive for hair growing agent and only recites a polysiloxane compound, claims are interpreted as compound claims. Thus, Applicant is reminded that a recitation of intended utility in the preamble does not impart patentability to a compound claim, but carries patentable weight in a method claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S Channavajjala whose telephone number is 703-308-2438. The examiner can normally be reached on 7.30 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 703-308-2927. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-308-7924 for regular communications and 703-308-7924 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



Lakshmi S Channavajjala

Examiner

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September 6, 2002